To: Heidi Sickler (Kinder Morgan Energy Partners)

From: Nick Ricono (TRC)

Date: May 23, 2006

Subject: **Results of Sensitive Species Surveys for the Washout Repair Project on Line Section 111 in the San Gorgonio River, Riverside County, California**

BACKGROUND

SFPP, L.P. (SFPP), operating partnership for Kinder Morgan Energy Partners, L.P. (KMEP), owns and operates a 20-inch pipeline, Line Section (LS) 111, which transports petroleum products between Colton, California and Phoenix, Arizona. LS 111 crosses the San Gorgonio River near the intersection of Interstate 10 and State Highway 111 near the city of Cabazon in Riverside County, California (Figure 1, Attachment A). Heavy stormwater flows in 2004 undermined the soil cover over the pipeline leaving the line exposed in two locations. Area 1 occurs on the western edge of the San Gorgonio River and Area 2 occurs on the eastern edge of the San Gorgonio River adjacent to the Union Pacific Railroad tracks. SFPP is proposing to re-cover the exposed areas and install Flexible Concrete Revetments (FCR) that will stop erosion during future storm events. The project is scheduled for July and August of 2006.

PROPOSED IMPACTS

Area 1

Area 1 occurs along the western bank of the San Gorgonio River on the eastern slope of a large sand dune that washed away, leaving approximately 30 feet of pipeline exposed. SFPP plans to reconstruct the base of the sand dune using the FCR for protection against future storm events. The FCR structure will be approximately 3-feet-high and 125-feet-long and will be keyed into the hillside 10 feet along its northern edge for a total impact area of 0.07 acre. The area behind the FCR will be filled with 247 cubic yards of sand collected from the base of the stream channel adjacent to the FCR over an area of 0.14 acre at a depth of 1 foot. The backfilled area will be covered by a synthetic material in order to keep the sand in place. The impacts related to the construction of the FCR will be permanent. Impacts to the stream channel during excavation of sand will be temporary as subsequent storm events will re-contour the channel naturally.

Area 2

Area 2 occurs along the eastern bank of the San Gorgonio River at the base of a steeply sloping ledge that rises approximately 12 feet high from the base of the stream channel. Erosion during the flood events cut away the base of the hill leaving approximately 10 feet of pipeline exposed. Subsequently, earth from the ledge slumped back into the void re-covering the pipeline. SFPP plans to reconstruct the base of the hill using the FCR for protection against future storm events. The FCR structure will be approximately 4-feet-high and 180-feet-long for a total impact area of 0.11 acre. The area behind the FCR will be filled with 20 cubic yards of material collected from the top of the hill. The impacts related to the construction of the FCR will be permanent.

PURPOSE OF SURVEY

Results of an evaluation of biological resources conducted by TRC Solutions, Inc. (TRC) in the project area in January and March of 2005 showed the potential for occurrence of the federally threatened Coachella Valley fringe-toed lizard (*Uma inornata*) (CVFTL) and the federally endangered and California Native Plant Society (CNPS) List 1B species Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*) (CVMV). Based on conversations with the U.S. Fish and Wildlife Service (USFWS) and the Bureau of Land Management in March 2005, it was determined that the project area may also potentially provide habitat for the federally threatened desert tortoise (*Gopherus agassizii*) (DT).

TRC conducted the present survey during the blooming period of the CVMV (February through May [CNPS 2006]) in order to determine the potential for direct impact to the species during access, staging, and repair of both washout locations. While surveying the project area for CVMV, TRC also surveyed for sign of the CVFTL and DT. The following report describes the methods and results of that survey and discusses mitigation measures to be implemented in order to avoid impact to sensitive species during the proposed project.

METHODS

TRC Biologists Nick Ricono and Ryan Villanueva visually inspected the project area on April 21, 2006 for the presence of CVMV, CVFTL, and DT. The surveys were started at 10:00 a.m. when the weather was clear and warm with a 10-20 mile per hour wind from the west and a starting temperature of 73 degrees Fahrenheit. Transects were walked by the two biologists at 15 foot intervals to obtain 100% coverage along all access, staging, and construction areas at both Area 1 and Area 2. Transects were extended at 15 foot intervals to a distance of 300 feet beyond the construction areas at Area 1 and Area 2. Transects to the east of Area 2 stopped at the railroad tracks (approximately 120 feet east of the washout location) because of the physical barrier provided by this obstacle to small wildlife such as the DT and CVFTL.

Initial surveys were conduced on top of the dune in Area 1 as this location was thought to contain CVMV populations. The populations were confirmed at this location and it was therefore determined that the species was in bloom in the project area. Subsequent surveys involved visual inspection for the conspicuous blooms of the CVMV.

While conducting surveys for the CVMV, visual inspections were conducted simultaneously for live CVFTL and for sign of the DT including live tortoises, carcasses, burrows, tracks and scat.

Site photographs were taken and are included in Attachment B. Observations of plants and wildlife were recorded based on direct observation, wildlife sign (tracks, burrows, nests, scat, etc.), or vocalization. A list of plant and wildlife species observed during the April 21, 2006 survey is available in Attachment C.

RESULTS

As mentioned, a small population (12 individuals total in 3 distinct areas) of CVMV was identified at the top of the dune structure in Area 1 (Figure 1, Attachment A). The population is

approximately 120 feet west of the washout location. Surveys of remaining areas in Area 1 and Area 2 were negative for CVMV.

Surveys in Area 1 and Area 2 were negative for CVFTL.

Surveys in Area 1 were negative for DT sign.

During surveys east of Area 2, a potential DT burrow (Class 4-deteriorated condition, possibly tortoise) was observed approximately 120 feet north of the washout location, approximately 30 feet east of the ledge that makes up the eastern stream bank, and approximately 90 feet west of the railroad tracks (Figure 1, Attachment A). The Class 4 burrow had the shape of a DT burrow but was steep (approximately 5 degree angle) at the entrance (See photo documentation in Attachment B). The burrow traveled approximately 14 inches deep before turning sharply to the left and continuing out of sight. No tortoise sign was observed in or around the burrow. Canine scat was present at the mouth of the burrow and the sand above the mouth of the burrow had caved in. The burrow could potentially be the results of canine excavation of a rodent burrow coupled with erosion leading to the distinct half-moon shape of a standard DT burrow. No further DT sign was observed in Area 2.

CONCLUSIONS AND RECOMMENDATIONS

Based on the survey results, CVMV is present in Area 1 approximately 150 feet west of the washout location. The CVMV population is located on top of the dune and will, therefore, be easily avoided during access, staging, and construction in the project area. A potential DT burrow was observed in Area 2 so DT protection measures should be instituted in order to avoid take of the species. No CVFTL were identified in the project area but the highly mobile species may enter the project area at any time. Therefore, the following mitigation measures will be instituted to insure the protection of the CVMV, CVFTL, DT, and other sensitive species that may occur in the project area.

1) Activities within the wash shall be limited to the dry period of the year from May to November and when the wash is not actively flowing and no measurable rain is forecast within 48 hours. Best Management Practices shall be used during construction activities to prevent disturbed soils from entering the wash.

2) Project activities shall be conducted after March 31 and when air temperatures are at or above 71 degrees Fahrenheit, as requested by the USFWS (Marquez, pers. comm. 2005). This timing is intended to minimize potential impact to DT and CVFTL as they become active during these times making them easy to observe and avoid and allowing them to avoid construction areas.

3) Area 2 shall be surveyed by a USFWS authorized biologist for DT sign within 48 hours of the onset of project activities. Should a DT burrow be found in the project area, the biologist will insure that the burrow is un-occupied and flagged for avoidance. Should an occupied DT burrow be found in the project area, further consultation with the USFWS will be required to determine potential impact to the species.

4) A qualified biological monitor shall be onsite during all access, staging and construction activities to insure minimization of impact to habitat and insure no sensitive species enter the work area. The biological monitor shall flag the access, staging, and construction area with easily identified flagging to insure that the work activities, including movement of equipment to and from the dig site, will be kept to the smallest area possible to avoid unnecessary impacts to sensitive resources.

5) Before any construction activities begin on the project, the biological monitor shall conduct a Worker Awareness Training program for all construction personnel. The training shall cover the biological resources present and avoidance and minimization procedures designed to avoid impact to those resources. Specific information including hand-outs will be provided on methods used to avoid impact to the DT. Employees will sign a form stating that they attended the program and understand all protection measures for sensitive resources.

6) Should a DT or CVFTL (or any sensitive species) enter the construction area, construction activities will be stopped and the species will be allowed to leave the area on their own volition.

7) Upon completion of construction activities, all access and staging areas will be restored to its original condition.

8) Permanent impacts resulting from construction of the FCR at both Area 1 and Area 2 shall be mitigated at a 3:1 ratio at an offsite location approved by the California Department of Fish and Game and the Coachella Valley Water District.

9) A post-construction memo will be filed with the Carlsbad USFWS Office describing avoidance measures used and whether sensitive species were observed during the project activities.

By implementing these mitigation measures, all CVMV, CVFTL, and DT will be avoided during access, staging and construction at Area 1 and Area 2. Therefore, potential for impact to listed species will be reduced to less than significant levels for the proposed project.

REFERENCES

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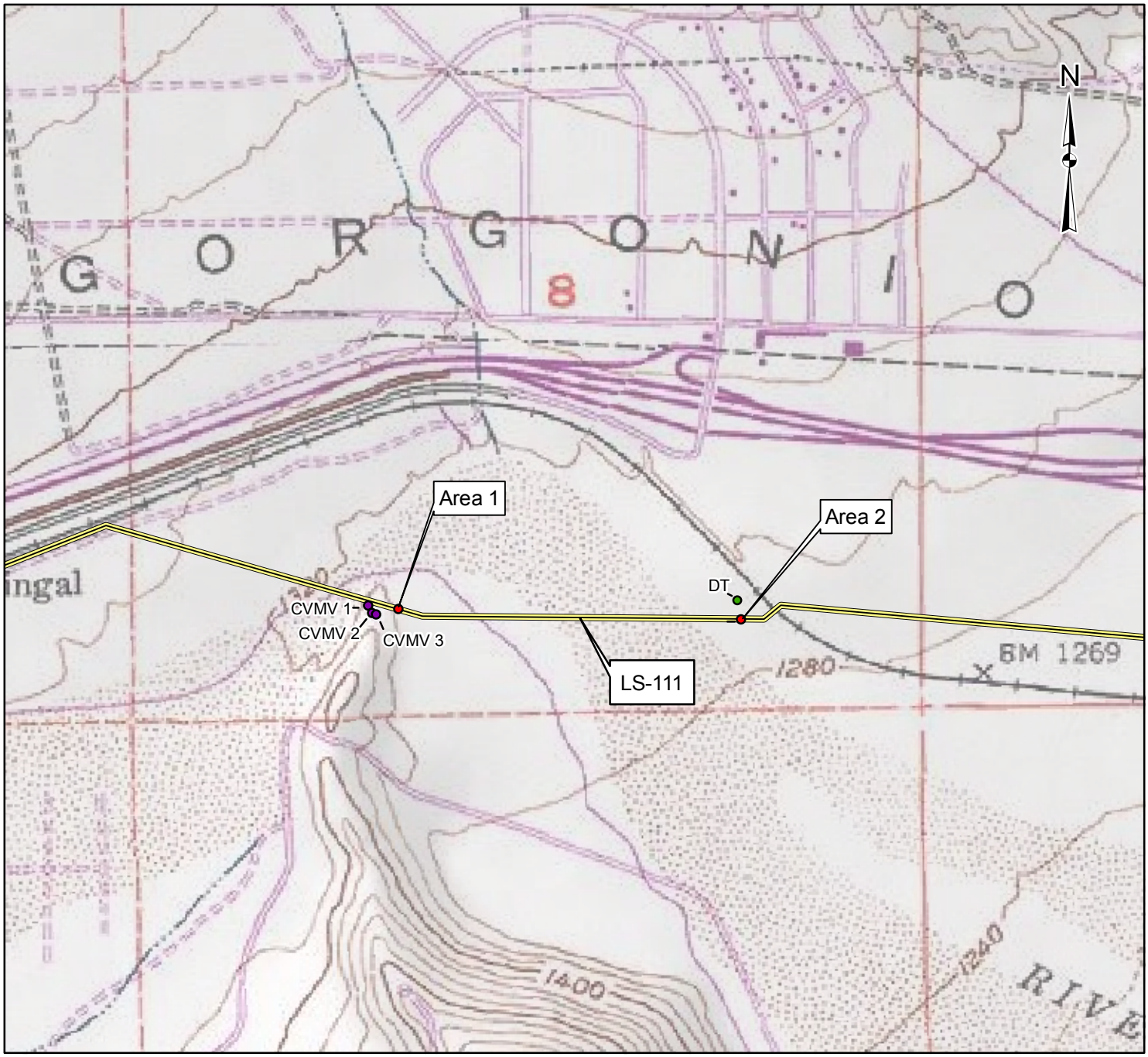
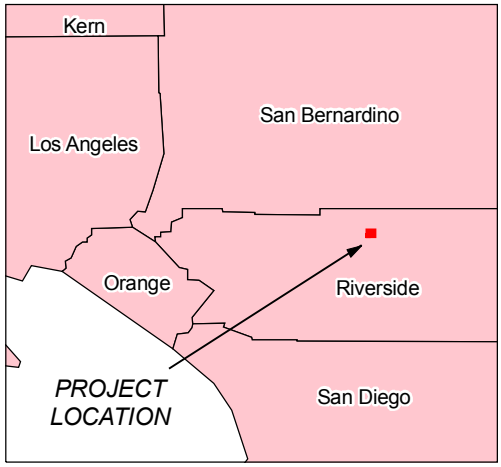
USFWS. 1992. Field Survey Protocol for any Non Federal Action that May Occur within the Range of the Desert Tortoise.

ATTACHMENT A

Figure





Legend

- LS-111
- Washout Locations
- CVMV - Coachella Valley Milk Vetch
- DT - Potential Desert Tortoise Burrow

1 inch = 1000 feet

1,000 500 0 1,000 Feet

Source:

United States Geological Survey
7.5 Minute Topographic Map:
Whitewater Quadrangle

Sensitive Species Survey

Washout Locations on Line Section 111 in the San Gorgonio River

Line Section 111
Riverside County, California

FIGURE 1

TRC
Customer-focused Solutions

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ATTACHMENT B

Site Photographs

LS 111 Washout – Photo Document

Photo 1 - Area 1 washout facing north toward Interstate 10.

Photo 2 - Area 1 facing south showing washout location, proposed access route, staging and construction areas.

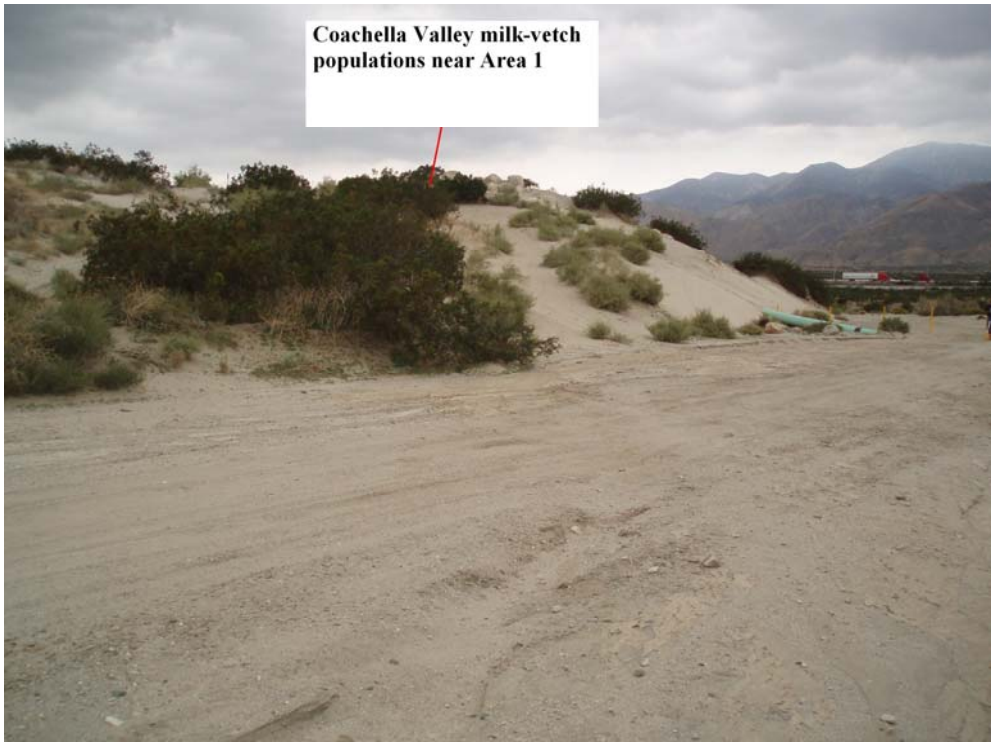

Photo 3 – Area 1 facing north showing the known Coachella Valley milk-vetch populations 150 feet west of the Area 1 washout location.

Photo 4 – Coachella Valley milk-vetch from the dune above the Area 1 washout. Photograph taken during 4/21/06 survey.

Photo 5 - Area 2 washout facing north showing the location within the eastern stream bank. The bank has collapsed re-covering the pipeline washout.

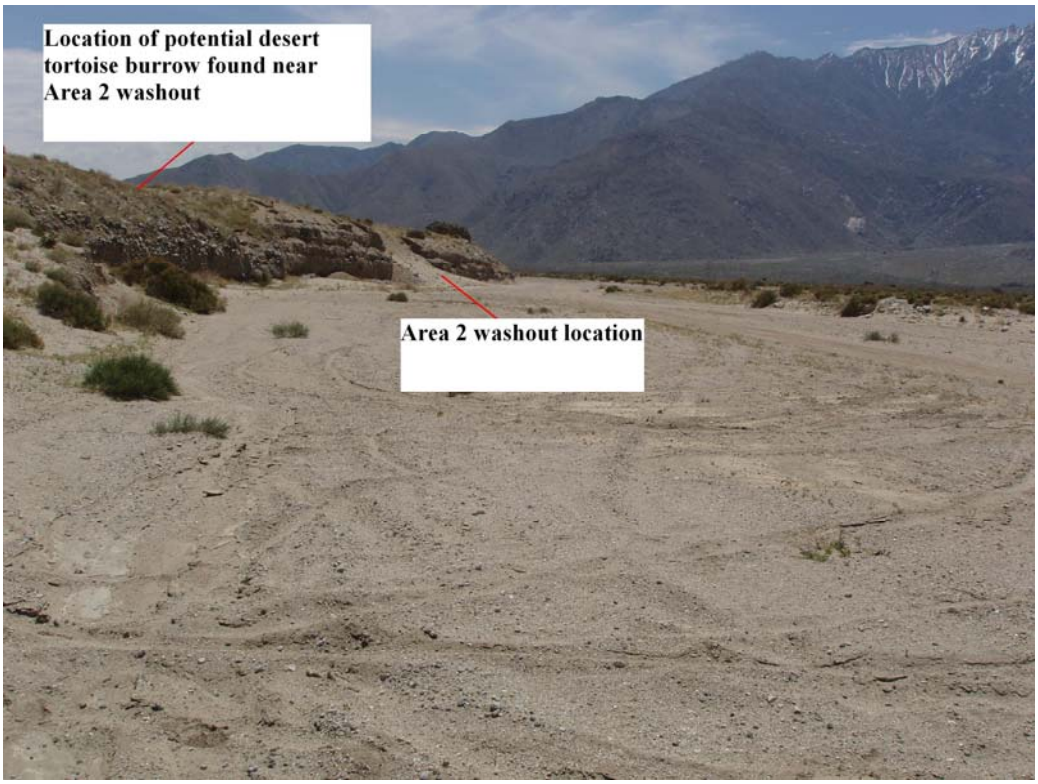

Photo 6 - Area 2 facing south showing the location of the potential desert tortoise burrow 120 feet north of the Area 2 washout location.

Photo 7 – Potential desert tortoise burrow found 120 feet north of the Area 2 washout, 30 feet east of the eastern stream bank of the San Gorgonio River and 90 feet west of the railroad tracks.

ATTACHMENT C

List of Species Observed During April 21, 2006 Survey

Table 1. List of plant and wildlife species observed during the April 21, 2006 survey for sensitive species.

Plants	
Common Name	***Scientific Name***
Arrow-weed	*Pluchea sericea*
Black banded rabbit brush	*Chrysonthamnus paniculatus*
Bladderpod sage	*Salazaria mexicana*
Broom baccharis	*Baccharis sarothroides*
California ephedra	*Ephedra californica*
California evening primrose	*Oenothera californica*
Chia sage	*Salvia columbariae*
Coachella Valley milk vetch	*Astragalus lentiginosus* var. *coachellae*
Coastal bladderpod	*Isomeris arborea*
Creosote bush	*Larrea tridentata*
Desert canterbury bell	*Phacelia campanularia*
Desert olive	*Forestiera pubescens*
Desert mallow	*Sphaeralcea ambigua*
Desert sand verbena	*Abronia villosa*
Desert willow	*Chilopsis linearis*
Fremont pincushion	*Chaenactis fremontii*
Giant reed	*Arundo donax*
Jimson weed	*Datura wrightii*
Perennial eriastrum	*Eriastrum densifolium*
Sandpaper plant	*Petalonyx thurberi*
White bursage	*Ambrosia dumosa*
Winterfat	*Krascheninnikovia lonata*
Wildlife	
Black tailed jackrabbit	*Lepus californicus*
Mourning dove	*Zanaida macroura*
Western fence lizard	*Sceloporus occidentalis*
Long-tailed brush lizard	*Urosaurus graciosus*